

Grant Application Approval

Please attach a copy of the Grant Application to this form

Grant Title: Pfizer Community Grant

Name of Applicant: Kristina Ngai

School: WJJMS

Funding Source: Pfizer

Grant Value: \$4303.73
\$4748.99

COO
5/6/22

Grant Purpose (goals):

Upgrading middle school robotics equipment to make it compatible with curriculum for STEM and programming.

Requirements of Grant (reports, surveys, expectations):

None.

What other Departments may be impacted by grant funding? (i.e: IT Department, Teaching & Learning, etc):

None.

Submission Deadline: March 31, 2022
(date and time)

Grant Award Period Start: 7/1/2022 End: 6/1/2023

Grant Reporting Deadline:

7/1/2022

Link to Grant Request for Proposal (RFP):

https://www.cybergrants.com/pls/cybergrants/ao_application.display_step?x_gm_id=8542&x_step=1&x_source_flag=&x_style_id=&x_org_id=

Approvers	
Principal <u>[Signature]</u>	Director of Teaching and Learning <u>[Signature]</u>
CFO <u>[Signature]</u>	Superintendent <u>[Signature]</u>

Grant Manager: _____

BOE Meeting Date: _____

Copy of Pfizer grant submission for
Innovation 2022.

Your Submitted Request

The request you previously submitted appears below. No further changes may be made to this request. Click [here](#) to return to the Welcome Page.

Community Grants

* Location 4 - Groton, CT

Organization Information

* Legal Name	Colchester Public School District
* Organization Country	United States
* Organization Address	127 Norwich Ave. 
Organization Address 2	Ste 202
* Organization City	Colchester
Organization State	Connecticut
Organization Zip/Postal Code	06415
* Organization Main Telephone	860-537-7264
Organization Main Fax	860-537-1252
* Organization Website Address	colchesterct.org
Qualified no-profit?	Yes
Government Entity?	Yes

* Mission Statement and History

Our mission: We Create Innovative Thinkers for a Dynamic World.

Our Goals: We will raise academic growth expectations for all students.

Students will develop innovative thinking and authentic problem-solving skills by engaging in rigorous tasks.

Our instruction and curriculum facilitate integrated, real-world learning that maximizes individual potential of each student.

We will increase our capacity to respond to student academic, emotional and social needs through partnerships with caregivers and the community.

We align the budget with the district vision and the needs of our students.

Contact Section

* First Name	Kristina
* Last Name	Ngai
Title	Middle School STEM and Innovations Teacher
Email Address	kngai@colchesterct.org
Telephone	[REDACTED]

Request Information

* Grants Program	Groton Community Grants
* Title	Middle School STEM Robotics Education
Start Date	08/29/2022
End Date	06/16/2023
* Focus Area (Funding Principle)	Science and Math Education
* Individual support?	No
* US based organization?	Yes

* City of Event	Colchester
* State of Event	CT
* Organization introduction	Our Innovations class is an elective course available to all students at William J. Johnston Middle School in Colchester, CT. It is a STEM based elective class that utilizes problem solving and project based learning to teach concepts of science, technology, engineering, art and math (STEAM). Our Innovations class serves every sixth grade student in the school as a required elective as well as half of the 7th and 8th grade students in the school as a choice elective. The Innovations classroom and lab is one of our largest learning spaces in the school. The space also functions as a student makerspace and experiment center where students can come in to work on their own self directed projects and approved experiments during their grade level workshop hour. This class has allowed us to provide STEM learning and STEAM based project opportunities to every student within our middle school. When we created this class in 2016, our school made a commitment to bring STEM education to all students. As a result, we have seen a 19% increase in students enrolling in STEM and technology education at the high school level since the start of Innovations. We have also seen a 40% increase in the number of female students enrolling in STEM and Technology based elective classes at the high school level, which we believe to be directly related to the inclusive approach we use for our STEM programming in our middle school Innovations and technology classes. We've had students participate in and bring back awards from the Connecticut State Invention Convention, The Connecticut Science and Engineering Fair, and the National Invention Convention. Innovations continues to grow as a class and course selection that helps students of all backgrounds access and discover a love of STEM.
* Description	Our goal with our Innovations program is to continue to bring hands-on STEM education to all students. In our 8th grade elective class, we incorporate advanced technologies into our curriculum so that students aren't afraid to engage with complex machines and STEM concepts. We would use this grant to improve and extend our robotics curriculum so that it integrates better STEM labs and concepts. Currently, we have several robotics kits that are outdated and unable to be programmed. While putting together the hardware can be a worthwhile project in teamwork and basic mechanics, it's missing the science and math needed to truly make it a STEM based educational experience.

We would like to purchase VEX robotics' smallest class set of five robots plus one additional robot so that we can accommodate students building and programming each robot in groups of 4-5. We have selected these VEX kits as they are able to link by bluetooth to student chromebooks and can be used with a free online block coding software called VEXcode that will allow our students in our Innovations class as well as our 8th grade programming class to utilize the robots, potentially using them for twice the number of students. We are also choosing to use the VEX brand because we will still be able to use and integrate the hardware from our old robotics kits as supplemental and replacement parts as the hardware is backwards compatible.

With this classroom kit also comes access to an entire library of online STEM based labs that we can integrate into our curriculum. These labs are provided free to the school and would be available year after year with no subscription necessary. Through this classroom set we would finally be able to put the science and math into our STEM robotics curriculum.

* Program objectives (Nature of Request)

The program objectives of the WJJMS Innovations Class are to introduce all students to opportunities in the areas of science, technology, engineering and math (STEM). Teaching and reinforcing science and engineering practices aligned with the Next Generation Science Standards (NGSS). Engaging students in 21st century skills such as teamwork, critical thinking, problem solving, creativity and imagination. Providing a venue and support for students pursuing STEM projects that extend outside the boundaries of the science classroom. Ensuring an educational environment where all students feel safe to explore and engage in STEM and real world immersion problem solving. Cultivating curiosity, interest, and appreciation for the sciences within all students. We have seen a growing interest in robotics since the start of our program in 2016. We plan to use this funding to purchase robotics kits that will make programming and STEM concepts in robotics accessible to all students.

* Project timelines

We hope to purchase the robotics kits during the Summer of 2022 or soon after for immediate use during the 2022-23 school year and beyond.

* Patient access to treatment?

No

* Patient education?	No
* Health screening?	No
* Pfizer influence	I understand
* Sources of funding	We have a small amount of money from our yearly budget for the Innovations STEM class dedicated to maintenance and parts replacement for our robotics equipment (usually \$200 - \$250 annually but not guaranteed). Outside of this there are currently no funds set aside for robotics equipment or for the robotics curriculum in our middle school.
Attachments	• <u>Budget History for Innovations.pdf (42.87 K), uploaded by Kristina Ngai on 03/29/2022</u>
* Request Type	Monetary Support
Currency	USD - US Dollar
Request Amount	4748.99 USD
* Partial support?	Yes
Use of Funds	We will use \$3999.00 to purchase VEX Robotic's smallest available classroom kit of five programmable robots and one classroom competition playing field. We will purchase one additional robot for \$749 in order to provide enough robots for students to work in groups of 4-5 within a class.
* Recognition of Pfizer's Support	We will publish a public thank you statement in our district wide newsletter, school newsletter, and teacher/school twitter accounts.
* Registrations or admissions?	No
* Advertising?	No
* Recruiting booth?	No
* Value of acknowledgement	none
* Involvement of Pfizer Employee(s)	No
* Federal Official Funding	No

HCP Funding No

Authorized Signatory

- * Authorized Signatory Name Jeffrey E. Burt
- * Authorized Signatory E-mail jburt@colchesterct.org
- * Authorized Signatory Title Superintendent of Schools

Additional Authorized Signatory Name Dr. Charles Hewes

Additional Authorized Signatory E-mail chewes@colchesterct.org

Additional Authorized Signatory Title Director of Teaching and Learning

Payment Information

- * Different Payment Address No
- * Payment Confirmation I acknowledge

Certifications

- * Certification I agree

[Need Support?](#)

Community Grants

* indicates required field

* Location

Pfizer's Groton Laboratories are proud to support non-profit organizations in CT and Southwest Rhode Island with an emphasis on our local New London County community. Grant applications are accepted through a once-per-year grant cycle. Applications are accepted through March of each calendar year. Applications submitted by the March 31 application deadline will be considered for programs occurring the following July through June. Funding decisions will be announced to applicants within twelve weeks of the application deadline.

Please note, the Groton/New London site will not support any of the following:

- Endowment campaigns
- Individual persons
- Capital campaigns
- Television, video, radio projects
- Loans or debt reduction
- Trips, tours, cultural exchange programs
- Attendance costs for conferences/seminars
- Political causes or campaigns
- Sporting events
- Events where Pfizer is the sole sponsor
- Town, state, federal programs
- Galas and other fundraisers
- Activities aimed at improperly influencing any entity, including but not limited to healthcare professionals or government officials
- Activities that may improperly influence prescribing, formulary positioning or recommendation of Pfizer products
- Activities that may result in off-label promotion of Pfizer products
- Activities considered quid pro quo for service or support
- Non-research grant proposals and donations to individual healthcare professionals or group practices

* Pfizer influence

Check here to designate that you understand and agree that Pfizer will not exercise any influence over organizations or programs supported as a result of this grant application.

☒ I understand

